

ON THE LEPIDOPTERA IN THE TRING MUSEUM SENT  
BY MR. A. S. MEEK FROM THE ADMIRALTY ISLANDS,  
DAMPIER, AND VULCAN ISLANDS.

By LORD ROTHSCCHILD, F.R.S., Ph.D.

WHILE making his very successful collection on Rook Island, Mr. Meek had the misfortune to contract a bad sunstroke, so that the three last collections were made by his assistants during his convalescence. With the exception of a few specimens got by the *Challenger*, and a very small lot of Rhopalocera received quite recently by Herr Niepelt, no collections have ever been made on the Admiralty Islands. Captain Webster collected a few butterflies on St. Gabriel, a small satellite island of the Admiralty group. From Dampier a few insects were obtained by Dr. Hagen, and Dr. Werner collected eight species on Vulcan Island. The insects from the Admiralties were all procured at and around the trading station established on the main island about January 1913 by the Germans. The expedition collected on the Admiralty Islands during September and October 1913, on Vulcan Island during November and December 1913 and January 1914, and on Dampier Island in February and March 1914. Dampier Island is near the Astrolabe Bay, and Vulcan Island lies considerably to the west of it.

RHOPALOCERA

PAPILIONIDAE

Papilioninae

1. *Papilio priamus poseidon* (Dbl.)

*Ornithoptera poseidon* Doubleday, *Ann. Mag. Nat. Hist.* (1) xix. p. 173 (1847) (Darnley Island).

The specimens from both Dampier and Vulcan Islands show no appreciable difference from those from the mainland of German New Guinea, though the ♀♀ include a preponderance of individuals having the light spots reduced in size. 1 ♂ from Dampier has three black spots on the hindwing, but the rest have either two or none at all (ab. *pegasus* Feld.).

7 ♂♂, 8 ♀♀, Vulcan Island; 4 ♂♂, 5 ♀♀, Dampier Island.

2. *Papilio priamus admiralitatis* subsp. nov.

This form is nearest to *P. p. bornemanni*, but very distinct.

♂. *Above.* Differs from *bornemanni* in the entire absence of green scaling on the veins in disc of forewing. On the hindwing it differs by having a golden yellow patch in the costal area, in the much denser green scaling, and in the much larger and more distinct black spots.

*Below.* On forewing there is more green scaling between veins 8 and 9. On hindwing the yellow subcostal patch is also present, the black patches are very large, yellow tornal patch is smaller, and the black dot in it much enlarged.

♀. *Above.* Differs from *bornemanni* in its shorter rounder wings and more blackish-grey brighter ground colour. On the hindwing the pale patches run up

closer to the cell and four of the eight ♀♀ have a white spot in the cell; the margin is much more deeply scalloped.

*Below.* On the hindwing the dark spots in the light patches are very much larger.

1 ♂, 8 ♀♀, Manus, Admiralty Islands.

### 3. *Papilio helena papuensis* (Wall.)

*Ornithoptera helena* local form *papuensis* Wallace, *Trans. Linn. Soc. Lond.* xxv. p. 38. sub. No. 7 (1865) (New Guinea, Salwatty).

Indistinguishable from specimens from mainland of New Guinea.

5 ♂♂ and 6 ♀♀ (♀-f. *papuensis*), Vulcan Island; 1 ♂, Dampier Island.

### 4. *Papilio polydorus dampierensis* Hag.

*Papilio polydorus dampierensis* Hagen, *Jahrb. Nass. Ver. Nat. L.* p. 50. No. 6 (1897) (Dampier Island).

5 ♂♂, 6 ♀♀, Dampier Island.

### 5. *Papilio polydorus vulcanicus* subsp. nov.

♂♀. *Above.* Differ in the white patches beyond cell, and the white spot in the cell being larger and less suffused with black scales.

*Below.* The band of red spots on hindwing is generally smaller, and the red smear below vein 2 is much reduced. On the forewing the white is more extended.

5 ♂♂, 8 ♀♀, Vulcan Island.

### 6. *Papilio polydorus utuanensis* Ribbe

*Papilio polydorus utuanensis* Ribbe, *Iris*, 1898. p. 68 (New Ireland and Duke of York Island).

I cannot separate the Admiralty specimens from *utuanensis*.

7 ♂♂, 6 ♀♀, Manus, Admiralty Islands.

### 7. *Papilio euchenor euchenor* Guér.

*Papilio euchenor* Guérin, *Voy. Coquille*, t. 13. f. 3 (1829) (New Guinea).

4 ♂♂, 4 ♀♀, Vulcan Island.

### 8. *Papilio euchenor subcoerulea* subsp. nov.

♂♀. Differ from *P. e. godarti* on the underside by the longer streaks emitted by the uppermost of the subapical spots on the forewing, and in the much greater extent of the blue subterminal markings on the hindwings.

7 ♂♂, 4 ♀♀, Dampier Island.

### 9. *Papilio phestus reductus* subsp. nov.

♂. *Above.* Nearest to *P. ph. parkinsoni*, but differs from all the three described races in having no indication whatever of any light spot in cell of hindwing.

*Below.* It resembles most *P. ph. phestus*.

♀. *Above.* At once distinguishable from all three described races on the

hindwing in the absence of any white spot in the cell and in the strong reduction in size and number of the discal white spots, there being only two small ones in two specimens, and in the remaining two an indication of a third.

1 ♂, 2 ♀♀, Manus, Admiralty Islands. (♀ Type).

#### 10. *Papilio aegaeus ormenus* Guér.

*Papilio ormenus* Guérin, *Voy. Coquille*, t. 14. f. 3 (1829) (New Guinea).

The ♂ from Vulcan is ♂-f. *pandion* Wall., an extreme example with no trace of a subapical band on the forewing either above or below. The ♂ from Dampier Island is ♂-f. *ormenus* Guér. with a well-developed subapical band.

1 ♂, Vulcan Island; 1 ♂, Dampier Island.

#### 11. *Papilio weymeri* Niep.

*Papilio weymeri* Niepelt, *Lepidop. Niep.* part i. p. 53 (1914) (Admiralty Islands).

This is a most distinct species, of which the ♂ is described below for the first time.

♂. *Above.* Nearest to *P. bridgei*, but band on forewing curves inwards gradually from vein 2. On hindwing the band is broader but does not run in more than half the distance to base of wing above vein 7.

*Below.* It is unlike any of this group as it has a cream-coloured band of broad patches traversing both fore- and hindwing with imperfect blue moons beyond on hindwing and a large anal red blotch.

6 ♂♂, 6 ♀♀, Manus, Admiralty Islands.

#### 12. *Papilio ulysses autolyceus* Feld.

*Papilio autolyceus* Felder, *Verhand. zool.-bot. Ges. Wien*, 1864, p. 321. No. 428 (New Guinea) (Nom. nud.); id. *Reise Novara II. Lepid.* p. 114. No. 86 (1865) (New Guinea).

2 ♂♂, Vulcan Island.

#### 13. *Papilio ulysses melanotica* Hag.

*Papilio ulysses autolyceus* ab. *melanotica* Hagen, *Jahrb. Nass. Ver. Nat.* l. p. 56 (1897) (Moluccas).

The ♂ is undescribed.

♂. *Above.* Differs from *P. u. autolyceus* in the blue being darker and less metallic; on forewing above median nervure it barely reaches apex of cell and is absent in costal area; below median nervure the patches are cut short exactly in a straight line with apex of cell. On hindwing the blue is much reduced and sharply cut off rectangularly.

*Below.* The whole colour is much darker.

7 ♂♂, 5 ♀♀, Dampier Island.

#### 14. *Papilio ulysses gabrielis* Rothsch.

*Papilio ulysses gabrielis* Rothschild, *Nov. Zool.* v. p. 217 (1898) (St. Gabriel).

9 ♂♂, Manus, Admiralty Islands.

#### 15. *Papilio codrus auratus* Rothsch.

*Papilio codrus auratus* Rothschild, *Nov. Zool.* v. p. 218 (1898) (St. Gabriel).

The ♂ has the golden colour of the median band very distinct and brilliant.

2 ♂♂, 2 ♀♀, Manus, Admiralty Islands.

16. *Papilio codrus medon* Feld.

*Papilio medon* Felder, *Verh. zool.-bot. Gesell. Wien*, 1864. p. 306. No. 238. and p. 351. No. 136 (New Guinea) (Nom. nov. for *P. codrus* De Haan).

While the specimens from Vulcan Islands are typical *medon*, several of the Dampier Island ones have the median band quite as narrow as in true *codrus*.

1 ♂, 3 ♀♀, Vulcan Island; 4 ♂♂, 7 ♀♀, Dampier Island (1 ♀ bred).

17. *Papilio sarpedon messogis* Fruhst.

*Papilio sarpedon messogis* Fruhstorfer, *Entom. Zeit. (Stuttgart)*, xxi. p. 183 (1907) (Key, Aru).

4 ♂♂, 4 ♀♀, Vulcan Island.

18. *Papilio eurypylus lycaonides* Rothsch.

*Papilio eurypylus lycaonides* Rothschild, *Nov. Zool.* ii. p. 430 (C.) (1895) (New Guinea).

1 ♀, Vulcan Island.

19. *Papilio macfarlanei admiralia* subsp. nov.

♀. *Above.* Differs from *P. m. cestius* Fruhst. (*Amboina* fixed Jordan) in the smaller green spots in cell, in the much wider and more apple green median band of the forewing, and the almost obsolete small subterminal spots. On hindwing it differs in the larger green and whitish costal and cellular markings, and the reduction of the subterminal band of spots to two dots.

*Below.* Differs in the smaller cell spots and almost obsolete subterminal dots on forewing, and on hindwing in having only two small subterminal green dots, and an extra red spot above tornus.

7 ♀♀, Manus, Admiralty Islands.

20. *Papilio agamemnon admiralis* subsp. nov.

♂♀. Nearest to *P. a. salomonis* Rothsch.

*Above.* Differs in the subterminal line of spots on forewing being much smaller.

*Below.* Differs on hindwing in the smaller red spots at anal angle and on each side of vein 7, also in the absence of any postmedian or tornal red spots.

3 ♂♂, 5 ♀♀, Manus, Admiralty Islands.

## Pierinae

21. *Catopsilia crocale rivalis* Fruhst.

*Catopsilia crocale flava* ♀-f. *rivalis* Fruhstorfer, *Seitz Grossschm. Erde*, ix. p. 163. pl. 68. f. d. 4 (1910) (Moluccas, New Guinea, etc.).

Fruhstorfer applied the name given by Butler to the New Guinea race, and renamed the Celebes form, so I have unfortunately had to apply an aberrational name to the New Guinea race.

3 ♂♂, 6 ♀♀, Vulcan Island; 1 ♀, Dampier Island.

22. *Terias candida diotima* Fruhst.

*Terias candida diotima* Fruhstorfer, *Seitz Grossschm. Erde*, ix. p. 172 (1910) (German New Guinea and Vulcan).

4 ♂♂, 4 ♀♀, Vulcan Island.

23. *Terias candida papuana* Butl.

*Terias papuana* Butler, *Ann. Mag. Nat. Hist.* (7) i. p. 60. No. 9 (1898) (Misol, etc.).

5 ♂♂, 3 ♀♀ Dampier Island.

24. *Terias hecabe oeta* Fruhst.

*Terias hecabe oeta* Fruhstorfer, *Seitz Grossschm. Erde*, ix. p. 168 (1910) (New Guinea Region).

6 ♂♂, 3 ♀♀, Vulcan Island; 3 ♂♂, 3 ♀♀, Dampier Island; 5 ♂♂, 1 ♀, Manus, Admiralty Islands.

## DANAIDAE

## Danainae

25. *Danaida philene bonguensis* (Fruhst.)

*Salatura mytilene bonguensis* Fruhstorfer, *Berl. Entom. Zeitschr.* 1899. p. 68 (German New Guinea).

4 ♂♂, 6 ♀♀, Vulcan Island; 4 ♂♂, 4 ♀♀, Dampier Island.

26. *Danaida mytilene decipientis* Strand

*Danaida mytilene decipientis* Strand, *Lepid. Niep.* pt. i. p. 25 (1914) (Admiralty Islands).

6 ♂♂, 2 ♀♀, Manns, Admiralty Islands.

27. *Danaida melissa leucoptera* (Butl.)

*Danais leucoptera* Butler, *Ent. Mon. Mag.* xi. p. 163 (1874) (Dorey).

4 ♂♂, 4 ♀♀, Vulcan Island; 1 ♂, 1 ♀, Dampier Island.

28. *Danaida juvena ribbei* (Fruhst.)

*Radena juvena ribbei* Fruhstorfer, *Iris*, xix. p. 163 (1906) (New Ireland).

5 ♂♂, 3 ♀♀, Manus, Admiralty Islands.

29. *Danaida juvena eugenia* (Fruhst.)

*Danais juvena eugenia* Fruhstorfer, *Iris*, xix. p. 161 (1906) (German New Guinea).

4 ♂♂, 4 ♀♀, Dampier Island.

## Euploeinae

30. *Euploea alecto misagenes* Fruhst.

*Euploea alecto misagenes* Fruhstorfer, *Seitz Grossschm. Erde*, ix. p. 233 (1910) (Dampier Island).

♀. Undescribed, is similar to ♂, but white spots in postdiscal bands of both wings larger.

The type from Dr. Hagen's collection, now in the Tring Museum, is rather worn, so that it is much paler in colour than those mentioned below.

4 ♂♂, 4 ♀♀, Dampier Island.

31. *Euploea aethiops coffea* Fruhst.

*Euploea aethiops coffea* Fruhstorfer, *Seitz Grossschm. Erde*, ix. p. 234 (1910) (German New Guinea).

2 ♂♂, Dampier Island.

32. *Euploea weneri* Fruhst.

*Euploea weneri* Fruhstorfer, *Entom. Zeit.* (Stuttgart) 1909. p. 277 (Vulcan Island).

5 ♂♂, 4 ♀♀, Vulcan Island.

33. *Euploea nobilis* Strand

*Euploea nobilis* Strand, *Lepidop. Niep.* pt. i. p. 27. pl. viii. ff. 6, 7 (ab. *simplicior* f. 10) (1914) (Admiralty Islands).

5 ♂♂, 1 ♀ *nobilis*, 2 ♂♂ ab. *simplicior*, Manus, Admiralty Islands.

34. *Euploea subnobilis* Strand

*Euploea subnobilis* Strand, *Lepidop. Niep.* pt. i. p. 27. pl. viii. f. 9 (1914) (Admiralty Islands).

2 ♂♂, Manus, Admiralty Islands.

35. *Euploea insulicola* Strand

*Euploea insulicola* Strand, *Lepidop. Niep.* pt. i. p. 28. pl. viii. ff. 4, 5 (1914) (Admiralty Islands).

1 ♂, 5 ♀♀, Manus, Admiralty Islands.

36. *Euploea nemertes affinita* Strand

*Euploea nemertes affinita* Strand, *Lepidop. Niep.* pt. i. p. 28. pl. viii. f. 11 (1914) (Admiralty Islands).

♂ differs from *E. n. erima* by being darker and by having a much larger mauve patch below vein 2.

1 ♂, 3 ♀♀, Manus, Admiralty Islands.

37. *Euploea nemertes quintia* Fruhst.

*Euploea nemertes quintia* Fruhstorfer, *Seitz Grossschm. Erde*, ix. p. 266. pl. 81a 2 (1910) (British New Guinea).

The subterminal bands of spots vary much in size, but in none are absent as in the ab. *rhodia*.

5 ♂♂, 6 ♀♀, Dampier Island.

38. *Euploea nemertoides* sp. nov.

This species occurs side by side with *nemertes affinata*.

♂. *Above.* Forewing deep black-brown, a white median spot below subcostal nervure, a pale mauve square spot below vein 2, and a curved subterminal band of four to six white spots ringed with mauve. Hindwing costal half slate-grey glossed with deep brown, androconia pale cinnamon; lower half deep chocolate suffused with chestnut, three postdiscal white dots.

*Below.* All wings deeper brown; area of forewing below vein 2 basal two-thirds clothed with pale cinnamon androconia, apical third grey-brown; hindwing with complete band of postdiscal white spots and four or five subterminal blue dots.

♀. Differs in having on hindwing, also above, a postdiscal band of white spots.

Length of forewing: ♂ 44 mm., ♀ 48 mm.

Expanse: ♂ 93 mm., ♀ 103 mm.

7 ♂♂, 3 ♀♀, Manus, Admiralty Islands.

39. *Euploea nemertes erima* (Fruhst.)

*Salpinx swierstrae* ab. *erima* Fruhstorfer, *Berl. Entom. Zeitschr.* xlv. p. 284 (1899) (German New Guinea).

4 ♂♂, 4 ♀♀, Vulcan Island.

40. *Euploea pumila salpinxoides* (Fruhst.)

*Calliploea salpinxoides* Fruhstorfer, *Berl. Entom. Zeitschr.* xlv. p. 9 (1900) (Finschhafen).

3 ♂♂, 4 ♀♀ *salpinxoides*, 1 ♀ ab. *sublucinda*, Vulcan Island; 1 ♂ *salpinxoides*, Dampier Island.

41. *Euploea pumila jamesi* (Butl.)

*Calliploea jamesi* Butler, *Proc. Zool. Soc. Lond.* 1876. p. 766 (British New Guinea; Fergusson Island).

5 ♂♂, 3 ♀♀, Dampier Island.

42. *Euploea pumila bismarckiana* (Fruhst.)

*Calliploea cyprammelli bismarckiana* Fruhstorfer, *Berl. Entom. Zeitschr.* xlv. p. 7 (1900) (New Britain).

9 ♂♂, Manus, Admiralty Islands.

43. *Euploea vulcanica* sp. nov.

♂. Resembles some forms of *pumila*, but the lappet below vein 1 of forewing is much smaller, and the patch of androconia on hindwing is less extensive.

*Above.* Forewing chocolate brown, more rufous towards termen, and strongly glossed with deep purple; a curved row of graduated violet subterminal spots. Hindwing basal half chocolate below cell, costal area and cell grey with pale cinnamon androconia; outer half reddish wood-brown.

*Below.* Pale chocolate brown; a spot above vein 2 and basal two-thirds of area above and below vein 1 of forewing grey; a minute grey dot on vein 7.

♀. *Above.* Pale chocolate brown fading into fawn on outer one-third of wings; a series of pale violet subterminal spots on forewing, and costal area of hindwing mauve-grey.

*Below.* Similar, but on forewing a spot above vein 2 and basal two-fifths of area above vein 1 pale mauve, and four white postdiscal dots on hindwing.

Length of forewing: ♂ 35 mm., ♀ 36.5 mm.

Expanse: ♂ 74 mm., ♀ 77 mm.

1 ♂, 1 ♀, Vulcan Island.

44. *Euploea callithoe hansemanni* Honr.

*Euploea hansemanni* Honrath, *Berl. Entom. Zeitschr.* xxxii. p. 248 (1887) (German New Guinea).

7 ♂♂, 3 ♀♀, Vulcan Island.

45. *Euploea callithoe admiralia* Strand

*Euploea callithoe admiralia* Strand, *Lepidop. Niep.* part i. p. 26. pl. viii. f. 1 (1914) (Admiralty Islands).

The ♂ shows similar differences to ♂ *callithoe* as the ♀ does to the ♀ of the typical form.

3 ♂♂, 5 ♀♀, Manus, Admiralty Islands.

46. *Euploea treitschkei eugenia* Fruhst.

*Euploea treitschkei eugenia* Fruhstorfer, *Iris*, xxiv. p. 55 (1910) (Vulcan Island).

5 ♂♂, 4 ♀♀, Vulcan Island.

47. *Euploea treitschkei intermedia* subsp. nov.

♂ ♀. Exactly intermediate between *E. t. olivacea* and *E. t. eugenia*.

5 ♂♂, 2 ♀♀, Dampier Island.

48. *Euploea treitschkei ursula* (Butl.)

*Saphara ursula* Butler, *Ann. Mag. Nat. Hist.* (5) xi. p. 407 (1883) (D'Entrecasteaux Island, Admiralty Group).

Herr Fruhstorfer in *Seitz* has applied the name *ursula* to Fergusson Island specimens, mistaking D'Entrecasteaux Island for the D'Entrecasteaux group. The specimens from the D'Entrecasteaux group must bear the name *viridis* Butler, originally described from Thursday Island.

4 ♂♂, 4 ♀♀, Manus, Admiralty Islands.

**Palaeotropinae**49. *Tellervo zoilus hiempsal* Fruhst.

*Tellervo zoilus hiempsal* Fruhstorfer, *Seitz Grossschm. Erde*, ix. p. 273. pl. 78. c. 4 (1910) (German New Guinea).

5 ♂♂, 3 ♀♀, Dampier Island.

**SATYRIDAE****Satyrinae**50. *Melanitis constantia dampierensis* subsp. nov.

♂. Differs from *M. c. geluna* Fruhst. in the subapical pale band on forewing, being narrower and containing two ocelli.

♀. Resembles *M. c. dictatrix* Fruhst., but is larger, and the pale submarginal band on forewing is wider.

3 ♂♂, 1 ♀, Dampier Island.

51. *Melanitis amabilis insulicola* subsp. nov.

Differs from *M. a. valentina* Fruhst. in the broader pale subapical band in the ♂ and the deep maroon red of the ♀. Dampier specimens appear slightly larger.

6 ♂♂, 3 ♀♀, Dampier Island; 6 ♂♂, 3 ♀♀, Vulcan Island.

52. *Melanitis leda destitans* Fruhst.

*Melanitis leda destitans* Fruhstorfer, *Entom. Zeitschr. (Stuttgart)* xxii. p. 87 (1908) (German New Guinea).

4 ♂♂, 5 ♀♀, Vulcan Island; 3 ♀♀, Dampier Island.

53. *Melanitis leda dominans* Fruhst.

*Melanitis leda dominans* Fruhstorfer, *Entom. Zeitschr. (Stuttgart)*, xxii, p. 87 (1908) (Bismarck Islands).

4 ♂♂, 2 ♀♀, Manus, Admiralty Islands.

54. *Mycalesis terminus matho* Gr. Sm.

*Mycalesis matho* Grose Smith, *Ann. Mag. Nat. Hist.* (6) xiii, p. 501 (1894) (New Britain).

2 ♂♂, Dampier Island.

55. *Mycalesis phidon phidonides* Fruhst.

*Mycalesis phidon phidonides* Fruhstorfer, *Verh. zool.-bot. Gesell. Wien*, 1908, p. 204 (German N. Guinea).

8 ♂♂, Dampier Island.

56. *Mycalesis sirius antecanis* Fruhst.

*Mycalesis sirius antecanis* Fruhstorfer, *Verh. zool.-bot. Gesell. Wien*, 1908, p. 209 (German New Guinea).

4 ♂♂, 4 ♀♀; Vulcan Island.

57. *Mycalesis nerida theophila* Fruhst.

*Mycalesis nerida theophila* Fruhstorfer, *Verh. zool.-bot. Gesell. Wien*, 1908, p. 199 (German New Guinea).

7 ♂♂, 2 ♀♀, Vulcan Island.

58. *Mycalesis meeki* sp. nov.

Allied to *nerida*.

♂. *Above.* Antennae olive black above, below grey with club orange rufous; head, thorax, and abdomen dark olive brown. Forewing dark olive brown, cell and basal half paler; two small subapical ocelli; in outer half of wing below vein 4 is a large quadrate fulvous orange patch angled on inside, reach almost to inner margin and produced towards base of wing below vein 2; in this patch between veins 2 and 3 is a very large ocellus. Hindwing dark olive brown, basal half clothed with long paler olive hair; two large ocelli ringed with fulvous.

*Below.* Fulvous olive, not fulvous as in *nerida*, ocelli much larger than in *nerida*, and second from costa on hindwing flattened and shuttle shape, **not** round.

♀. Similar but larger and paler (four have four ocelli on hindwing above and two have three).

Length of forewing, ♂ 24 mm.; ♀ 26 mm.

Expanse, ♂ 52 mm.; ♀ 58 mm.

3 ♂♂, 4 ♀♀, Vulcan Island; 6 ♂♂, 3 ♀♀, Dampier Island. (Type ♂, Dampier Island.)

59. *Mycalesis subpersa* sp. nov.

♂. Allied to *perseus*, but the hindwings are longer and narrower and costa of forewing less arched.

*Above.* Sooty brown, a small black ocellus with white centre on forewing

above vein 2 on forewing; a sooty grey marginal band to hindwing with a black submarginal line.

*Below.* Same colour with purplish gloss; a double postmedian line innerside black, outer whitish, a band of orange-ringed ocelli with white dots.

♀. Similar, but larger and paler.

Length of forewing: ♂ 21 mm.; ♀ 24 mm.

Expanse: ♂ 45.5 mm.; ♀ 51.5 mm.

5 ♂♂, 5 ♀♀, Manus, Admiralty Islands.

#### 60. *Mycalesis subpersa vulcanica* subsp. nov.

♂. *Above.* Differs from *s. subpersa* in being paler, and the ocellus is almost obsolete.

*Below.* Differs in the ocelli being much smaller and the white outer part of double line more indistinct.

4 ♂♂, Vulcan Island.

#### 61. *Elymnias agondas dampierensis* subsp. nov.

♂. Differs from all other forms of *agondas* in having on both wings above a series of whitish blue submarginal spots.

*Above.* Velvety green-black with a metallic blue-green marginal band some seven millimetres wide, on the inner edge of which is the line of whitish-blue spots as in *hewitsoni*.

*Below.* Blackish chocolate glossed with purplish blue-green and the submarginal band of spots larger.

♀. Similar, but band of spots on upperside of forewing much larger.

8 ♂♂, 2 ♀♀, Dampier Island.

### AMATHUSIIDAE

#### Amathusiinae

#### 62. *Taenaris phorcas uranus* (Stdgr.)

*Taenaris anableps uranus* Staudinger, *Exot. Schmett.* i. p. 200 (1888) (New Britain. *ex errore* New Ireland).

3 ♂♂, 5 ♀♀, Manus, Admiralty Islands.

#### 63. *Taenaris catops vulcanica* subsp. nov.

♂. Nearly resembles ♂ of *mylaecheoides*, but the dark grey on forewing almost to vein 6 and on hindwing to vein 4 is much wider.

♀. Resembles *adriana*, but sooty black on forewing only reaches to a fold between veins 3 and 4 instead of to beyond vein 2.

2 ♀♀ have lost the large black apical patches on forewing and the sooty black on hindwing is reduced to a narrow margin. This form I propose to call ab. *submylaecha* ab. nov.

5 ♂♂, 3 ♀♀ *vulcanica*, 2 ♀♀ ab. *submylaecha*, Vulcan Island.

#### 64. *Taenaris catops dampierensis* subsp. nov.

♂♀. Nearest to *T. e. appina* Frnhst., but the dark colour above much more extended; on hindwing of ♀ it occupies more than three-fifths of wing; the ocellus

near apical angle of hindwing shows through above more than in any other race, in fact resembling most *T. urania* Linn. from Amboina in this respect. One ♂ has a much narrower border, is very white, and the ocellus does not appear on upperside. This form I name ab. **subluna** ab. nov.

5 ♂♂, 1 ♀, *dampierensis*, 1 ♂, ab. *subluna*, Dampier Island.

#### 65. *Taenaris rothschildi reducta* subsp. nov.

♂. *Above*. The grey is confined on forewing to costal edge and apex and a somewhat obsolescent band below vein 2. On hindwing the grey forms a smear over apical ocellus to vein 5; anal ocellus small and pale.

*Below*. The grey is confined in forewing to apex and costa, and on hindwing is reduced to a slight smear beyond apical ocellus.

♀. Similar, but grey below vein 2, widening more distinct with a reddish wash. 1 ♂, 1 ♀, Vulcan Island.

### NYMPHALIDAE

#### 66. *Issoria sinha admiralia* subsp. nov.

♂. Differs from *I. s. offaka* in the much narrower black borders to the wings and almost complete absence of black markings on disc of wings.

♀. Paler.

4 ♂♂, 1 ♀, Manus, Admiralty Islands.

#### 67. *Cynthia arsinoë rebeli* Fruhst.

*Cynthia arsinoë rebeli* Fruhstorfer, *Entom. Zeitschr.* xix. p. 215 (1905) (German New Guinea).

6 ♂♂, 2 ♀♀, Vulcan Island.

#### 68. *Cynthia arsinoë dampierensis* subsp. nov.

♂. Differs from *C. a. rebeli* in the much more distinct dark margin to both wings and the larger row of postdiscal spots.

♀. Differs in being much larger, forewing much blacker, hindwing much deeper rufous, and the dark bands of both wings wider and more distinct.

*Below*. Basal half of the wings of ♀ are washed with pale greenish olive, **not** rosy mauve, and all lines and spots more distinct.

Length of forewing: *rebeli* 52 mm., *dampierensis* 59 mm.

Expanse: *rebeli* 109 mm., *dampierensis* 123 mm.

4 ♂♂, 4 ♀♀, Dampier Island.

#### 69. *Cethosia obscura manusi* subsp. nov.

♂. Very similar to *C. o. gabrielis* Rothsch.

*Above*. Differs in the white spots being smaller on forewing.

*Below*. The black bands in cell of forewing are much broader and white subterminal spots smaller.

♀. Has smaller white spots on forewing above and below.

5 ♂♂, 4 ♀♀, Manus, Admiralty Islands.

70. *Precis hedonia zelima* (Fabr.)

*Papilio zelima* Fabricius, *System. Entom.* p. 492. No. 212 (1775) (Nova Hollandia).

4 ♂♂, 3 ♀♀, Vulcan Island.

71. *Precis hedonia admiralitatis* subsp. nov.

♂♀. *Above.* Differ from *P. h. zelima* in the more grey **less** rufous wash and the much more strongly developed ocelli on forewing.

*Below.* Differ in the more purplish mauve wash and bands.

3 ♂♂, 5 ♀♀, Manus, Admiralty Islands.

72. *Precis erigone tristis* (Misk.)

*Junonia tristis* Miskin, *Bl. Book II. M. Col. Poss.* 1891. p. 117 (British New Guinea).

4 ♂♂, 4 ♀♀, Vulcan Island.

73. *Precis vellida astrolabiensis* (Hag.)

*Junonia vellida* var. *astrolabiensis* Hagen, *Jahrb. Nass. Ver. Nat.* 1. p. 85 (1897) (Astrolabe Bay).

4 ♂♂, 4 ♀♀, Vulcan Island.

74. *Precis orithya novaeguineae* (Hag.)

*Junonia orithya* var. *novaeguineae* Hagen, *Jahrb. Nass. Ver. Nat.* 1. p. 85 (1897) (German New Guinea).

7 ♂♂, 2 ♀♀, Vulcan Island.

75. *Yoma algina parvifascia* subsp. nov.

♂. *Above.* Very large, and ground colour brilliant velvety black, in size equal to the largest *Y. a. odilia* Fruhst., but subapical spots almost obsolete and median band much narrower.

*Below.* Resembles *a. odilia*, but basal two-fifths darker more olive grey; median band only half the width, and powdered with black scales, outer half much more suffused with black, and ocelli much more filled with bright blue.

♀. Unlike any other ♀ *Yoma* except ♀ of the following form (*a. vulcanica*).

*Above.* Forewing dark sooty olive-brown, costal terminal areas strongly glossed with blue, two pale mauve subapical dots; median band one-third the width of that of any other form, dark fulvous orange freckled with black. Hindwing dark sooty olive-brown; median band double as wide as on forewing from tornus to vein 6, and as wide as on forewing between veins 6 and 7, outer half dark bright rufous, inner half fulvous orange, ocelli deep black.

*Below.* Dark olive-grey, median band bright mauve. A second ♀ above has outer one-quarter of both wings strongly glossed with blue, three postdiscal white spots on forewing, the median band on forewing much more suffused with dark scales, and the median band on hindwing having outer half (rufous) absent.

6 ♂♂, 2 ♀♀, Dampier Island. (Type ♀).

76. *Yoma algina vulcanica* subsp. nov.

♂. Smaller than preceding form and outer half below much darker; median band below yellowish, not pure white.

♀. The three ♀♀ are quite different *inter se*. The first ♀ resembles ♀ of preceding form, but duller in ground colour, and median band on hindwing almost obsolete, a row of postdiscal white spots on forewing, below uniform olive-grey median band almost obsolete showing as a dull mauve cloud.

The second ♀ is paler olive-brown with pale yellowish wood-grey median band, a postdiscal row of white spots and a subterminal row of mauve spots. Hindwing has wood-grey median band, a subterminal row of white marks, and the ocelli have distinct dull orange rings. Below median mauve band more distinct.

The third ♀ has the median band of both wings pale mauve, and on hindwing an orange band beyond band of ocelli. Below mauve median band is distinct.

5 ♂♂, 3 ♀♀, Vulcan Island. (Type ♀).

77. *Yoma algina manusi* subsp. nov.

♀. Differs from *a. kokopona* and *a. helisson* in the gigantic ocelli on hindwing above and on both wings below.

*Above*. The ground colour is much deeper, more black, and the bands are brighter and more distinct.

*Below*. The colours are brighter, all markings more distinct, and the subterminal and terminal areas and lines mauve-purple.

1 ♀, Manus, Admiralty Islands.

78. *Hypolimnias antilope antilope* (Cram.)

*Papilio antilope* Cramer, *Pap. Ecot.* ii. t. 183. ff. E. F. (1779) (Amboina).

This insect is so scarce, and we have so few specimens from New Guinea, that I cannot say if this is a distinct race or not. It agrees fairly well with Dr. Wollaston's three ♂♂ from the Snow Mountains, and is the exact counterpart of a ♂ from Amboina, but my solitary specimen from British New Guinea is very different. There appears to have been confusion between this and the more common *H. pithoeka* forms in the Papuan region.

1 ♀, Vulcan Island.

79. *Hypolimnias pithoeka dampierensis* subsp. nov.

♂. *Above*. Differs from *H. p. pithoeka* Kirsch and *H. p. uniformis* Salv. Godm. in its intense velvety black colour and broader wings. There is a subapical white patch, and a postdiscal row of white dots more or less obsolete on forewing, and a complete row of subdiscal white spots on hindwing, as well as intranervular terminal white spots. The postdiscal spots have **no** black rings as in *p. pithoeka*.

*Below*. Paler brown-black, outer one-third of hindwing strongly glossed with purple; along basal half of subcostal a series of small patches of white scales, costa to white subapical patch fawn-brown; a postdiscal row of pale-blue spots on both wings, and on hindwing a subterminal band of blue suffused markings.

♀. *Above*. Paler olive slaty black, and on forewing a subterminal band of indistinct ill-defined whitish markings.

*Below.* The spots are bluish white and the blue subterminal spots and purple gloss are absent from hindwing.

4 ♂♂, 4 ♀♀, Dampier Island.

#### 80. *Hypolimnias pithoea vulcanica* subsp. nov.

♀. *Above and Below.* Differs from ♀ *p. dampierensis* in its olive-black-brown colour, in its rufous-brown postcellular patch between costa and vein 5, and in the much larger postdiscal white spots. The second ♀ shows the rufous patch above less distinctly.

2 ♀♀, Vulcan Island.

#### 81. *Hypolimnias euploeoides* sp. nov.

This magnificent new species exactly resembles a large black, white-spotted *Euploea*.

♂ *Above.* Antennae black, club rufous; head, thorax, and abdomen black; a white spot at base of antennae, and two indistinct similar ones on collar. Forewing velvety brown-black; a white spot with a few blue scales above vein 2, and a minute white dot above vein 5. Hindwing sooty olive-brown, blackish towards base; a minute pale-blue dot above each of veins 2, 5, 6, and 7.

*Below.* Uniform chocolate-olive-brown, a series of white spots and marks below basal half of subcostal; an incurved postmedian band of pale-blue spots on forewing, and an outwardly curved similar sinuate band on hindwing.

♀. *Above.* Larger, forewing chocolate-olive-brown, a small whitish-blue dot, and beyond it a large oval spot below subcostal in cell; an incurved postmedian band of bluish-white spots. Hindwing paler olive-brown, an outwardly curved postmedian band of bluish-white spots.

*Below.* Similar to ♂, but all white markings larger.

Length of forewing: ♂ 47 mm., ♀ 53 mm.

Expanse: ♂ 100.5 mm., ♀ 112.5 mm.

1 ♂, 1 ♀, Mauns, Admiralty Islands.

#### 82. *Hypolimnias alimena eremita* Butl.

*Hypolimnias eremita* Butler, *Ent. Mon. Mag.* xx. p. 56 (1883) (Dorey).

4 ♂♂, 4 ♀♀, Vulcan Island; 6 ♂♂, 2 ♀♀, Dampier Island.

#### 83. *Hypolimnias alimena manusi* subsp. nov.

♂. Differs from *H. a. eremita* in the bright maroon-crimson suffusion of the whole underside.

4 ♂♂, Mauns, Admiralty Islands.

#### 84. *Hypolimnias misippus* (Linnaeus)

*Papilio misippus* Linnaeus, *Mus. Ludov. Ulric.* p. 264 (1764) (In Indiis).

3 ♀♀, f. *diocippus*, Mauns, Admiralty Islands.

85. *Hypolimnias bolina* (Linn.)

*Papilio bolina* Linnaeus, *Mus. Ludov. Ulric.* p. 295 (1764) (In Indiis).

Until all the chief varieties from every locality have been dissected, and the genitalia studied, I believe it is impossible to divide up this extraordinarily variable and widespread insect into subspecies. The ♂♂ enumerated below agree on the upperside almost exactly with true *bolina* Linn., while the ♀♀ are all the ♀-f. *iphegenia* Cram. The Admiralty ♂♂ have less white in the discal spot of the hindwing.

5 ♂♂, 5 ♀♀, Manus, Admiralty Islands; 5 ♂♂, 3 ♀♀, Vulcan Island; 3 ♂♂, Dampier Island.

86. *Hypolimnias deois deois* Hew.

*Hypolimnias deois* Hewitson, *Proc. Zool. Soc. Lond.* 1858. p. 464 (Aru Islands).

6 ♂♂, 2 ♀♀, Dampier Island.

87. *Hypolimnias deois panopion* Gr. Sm.

*Hypolimnias panopion* Grose Smith, *Nov. Zool.* i. p. 305 (1894) (Humboldt Bay).

1 ♀, Vulcan Island.

88. *Doleschallia browni* Salv. & Godm.

*Doleschallia browni* Salvin & Godman, *Proc. Zool. Soc. Lond.* 1877. p. 145, pl. xxii. ff. 3, 4 (Duke of York Island).

4 ♂♂, 3 ♀♀, Dampier Island.

89. *Doleschallia hexophthalmos ardys* Frnhst.

*Doleschallia hexophthalmos ardys* Fruhstorfer, *Seitz Grossschm. Erde.* ix. p. 561, pl. 113 a 1, 2 (1912) (German New Guinea).

2 ♂♂, Dampier Island; 1 ♀, Vulcan Island.

90. *Doleschallia rickardi* Gr. Sm.

*Doleschallia rickardi* Grose Smith *Am. Mag. N.H.* (6) v. p. 171 (1890); id., *Rhop. Exot.* ii. *Doleschallia*, p. 1, pl. i. f. 1 (1893) (New Ireland).

♀. The female, till now undescribed, only differs from the male in the transverse band across apex of cell being almost white.

1 ♂, 2 ♀♀, Dampier Island.

91. *Cyrestis acilia* (God.)

*Nymphalis acilia* Godart, *Enc. Méth.* ix. p. 378. No. 94 (1819) (Waigiou).

7 ♂♂, 2 ♀♀, Dampier Island.

92. *Cyrestes achates achates* Butl.

*Cyrestes achates* Butler, *Proc. Zool. Soc. Lond.* 1865. p. 481. No. 2 (Misol).

6 ♂♂, 3 ♀♀, Vulcan Island.

93. *Acca consimilis stenopa* (Fruhst.)

*Rahinda consimilis stenopa* Fruhstorfer, *Stett. Entom. Zeit.* lxi. p. 267 (1908) (German New Guinea).

7 ♂♂, 1 ♀, Vulcan Island.

94. *Acca consimilis melanotica* subsp. nov.

♂. This form is a most remarkable melanistic race of *consimilis*, but much larger than *stenopa*.

*Above.* Deep brown-black; the oblique subapical patch is reduced to two dark rufous-brown semi-coalescent spots, and the band between vein 3 and inner margin is reduced to less than one-half its size, and is dark rufous-orange suffused with dark brown; the band on the hindwing is less than one-half as wide, and dark orange-brown. Another ♂ has the whole upper surface brown-black with only a faint indication of the band on the hindwing, and that below vein 3 on forewing.

*Below.* The angulated broad band of *stenopa* on forewing is reduced to two small dark-orange patches, and on hindwing the outer dark one-third of wing of *stenopa* is increased to one-half, and there is a median and subcostal rusty brown band in the orange basal one-half. The underside of the extreme ♂ described above has the entire forewing black except a brownish fulvous patch above inner margin, and on hindwing narrow basal median orange bands.

4 ♂♂, Dampier Island.

95. *Acca venilia dampierensis* subsp. nov.

♂♀. Differ from *A. v. anceps* in the much narrower entirely blue bands and almost obsolete subterminal dots on hindwing; in the blue band above inner margin of forewing is a white spot.

8 ♂♂, 3 ♂♂, Dampier Island.

96. *Neptis shepherdii damia* Fruhst.

*Neptis shepherdii damia* Fruhstorfer, *Entom. Zeit. Guben.* 1905. p. 101 (German New Guinea).

1 ♂, Vulcan Island.

97. *Neptis shepherdii reducta* subsp. nov.

♂. Very large, intense black, white markings in and beyond cell of forewing absent, five discal and four subterminal spots much reduced. On hindwing median band much narrower and broken, consisting of two or three separate spots.

♀. Differs from ♀ *damia* in bands and spots being smaller and narrower.

3 ♂♂, 1 ♀, Dampier Islands.

98. *Parthenos sylvia admiralia* subsp. nov.

♂♀. Differ from *P. s. couppei* Ribbe in the semihyaline band of patches on forewing being pure white and much more extensive, in the olive colour of forewing above vein 2 being strongly suffused with pale Nile blue, and in the olive on hindwing being brighter and also tinged with Nile blue. Below the semihyaline patches are much larger, the subterminal black patch on forewing is very much larger and the whole underside is Nile blue.

4 ♂♂, 4 ♀♀, Manus, Admiralty Islands.

99. *Parthenos aspila aspila* Honr.

*Parthenos aspila* Honrath, *Berl. Ent. Zeitsch.* xxxii. p. 248, pl. v. f. 2 (1888) (German New Guinea).

Two specimens of this form were sent; as Vulcan Island is not far from the mainland they were probably blown across.

2 ♂♂, Vulcan Island.

100. *Parthenos aspila tenebrosa* subsp. nov.

♂ ♀. Differ from *P. a. aspila* by being much larger and very much darker, the rufous basal portions being suffused with green-black scales. The underside is strongly suffused with black.

Expanse: *aspila* ♂ 92 mm., ♀ 106 mm.

„ *tenebrosa* ♂ 114 mm., ♀ 122 mm.

4 ♂♂, 6 ♀♀, Dampier Island.

101. *Parthenos aspila vulcanica* subsp. nov.

♂ ♀. Differ from *P. a. aspila* in the basal area of wings being pale orange-rufous suffused with olive-green, a whitish patch at end of cell of forewing and below it, the outer three-quarters of wings strongly banded and barred and suffused with yellowish olive-green; two specimens lack the white in and below cell.

6 ♂♂, 6 ♀♀, Vulcan Island.

102. *Eulepis pyrrhus jupiter* (Butl.)

*Charaxes jupiter* Butler, *Lepid. Exot.* i. p. 14, pl. v. ff. 4 & 7 (1869) (Dorey).

4 ♂♂, 3 ♀♀, Vulcan Island.

103. *Eulepis pyrrhus admiralitatis* subsp. nov.

♂ ♀. Resemble *E. p. attila* Gr. Sm. above, and *E. p. seitzii* Rothsch. below.

*Above.* Differ from *attila* on hindwing in the discal white band being much narrower and edged much more distinctly with blue, there are also three large blue lunules beyond the band not present in *attila*. On the forewing the two post-cellular cream spots are larger, and there is on hindwing an orange patch at tornus wanting in *attila*.

*Below.* Differ from *seitzii* in the more rufous less olive ground-colour, in the absence of the large white patch in cell of forewing, and in the larger white marks beyond the cell and above veins 3 and 4. On hindwing they differ in the much wider black bands on basal half of wing and in the more uniform deep maroon of postdiscal band.

1 ♂, 5 ♀♀, Manus, Admiralty Islands.

(To be continued.)